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10 July 1980

China Report

POLITICAL, SOCIOLOGICAL AND MILITARY AFFAIRS

No. 98

Selections from JIEFANGJUN HUABAO

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SELECTIONS FROM JIEFANGJUN HUABAO

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese Nos 4, 5, 1980

CONTENTS

Test Flight Heroes in Scientific Research..... 1

Helicopter Supplies Altay Outpost
(Liang Changsheng and Duan Jiwen)..... 6

Step Up the Building of the Motherland..... 11

China's Shipbuilding Industry Sails Ahead..... 12

A New Type of Rifle and Grenade Developed
(Huang Jinghan and Lu Xiaoming)..... 22

Antitank Rifle Grenade Developed..... 24

Antiaircraft Artillery Equipment and Materiel Improved
(Lin Yonghui, et al.)..... 27

Mine-Laying Missile Vehicle Described..... 29

Water Conservancy Projects Along the Yellow River
(Chen Shangkui)..... 34

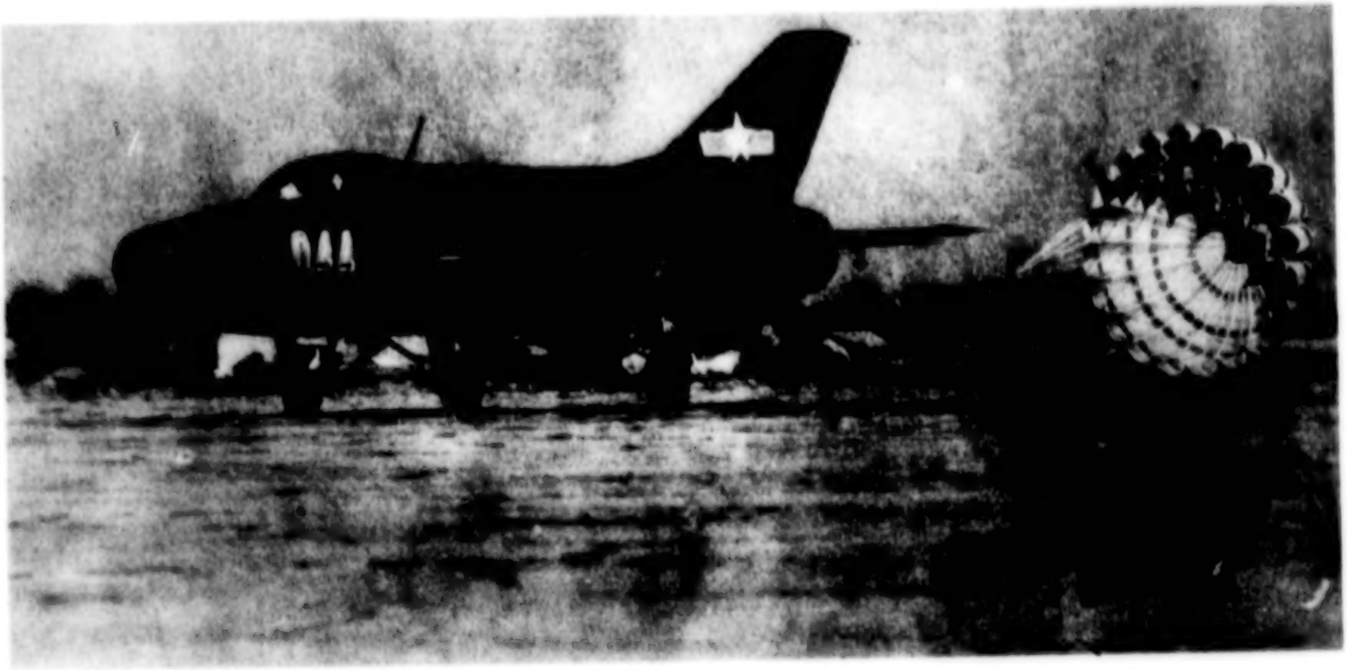
MILITARY AND PUBLIC SECURITY

TEST FLIGHT HEROES IN SCIENTIFIC RESEARCH

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 4, 1980 pp 12-15

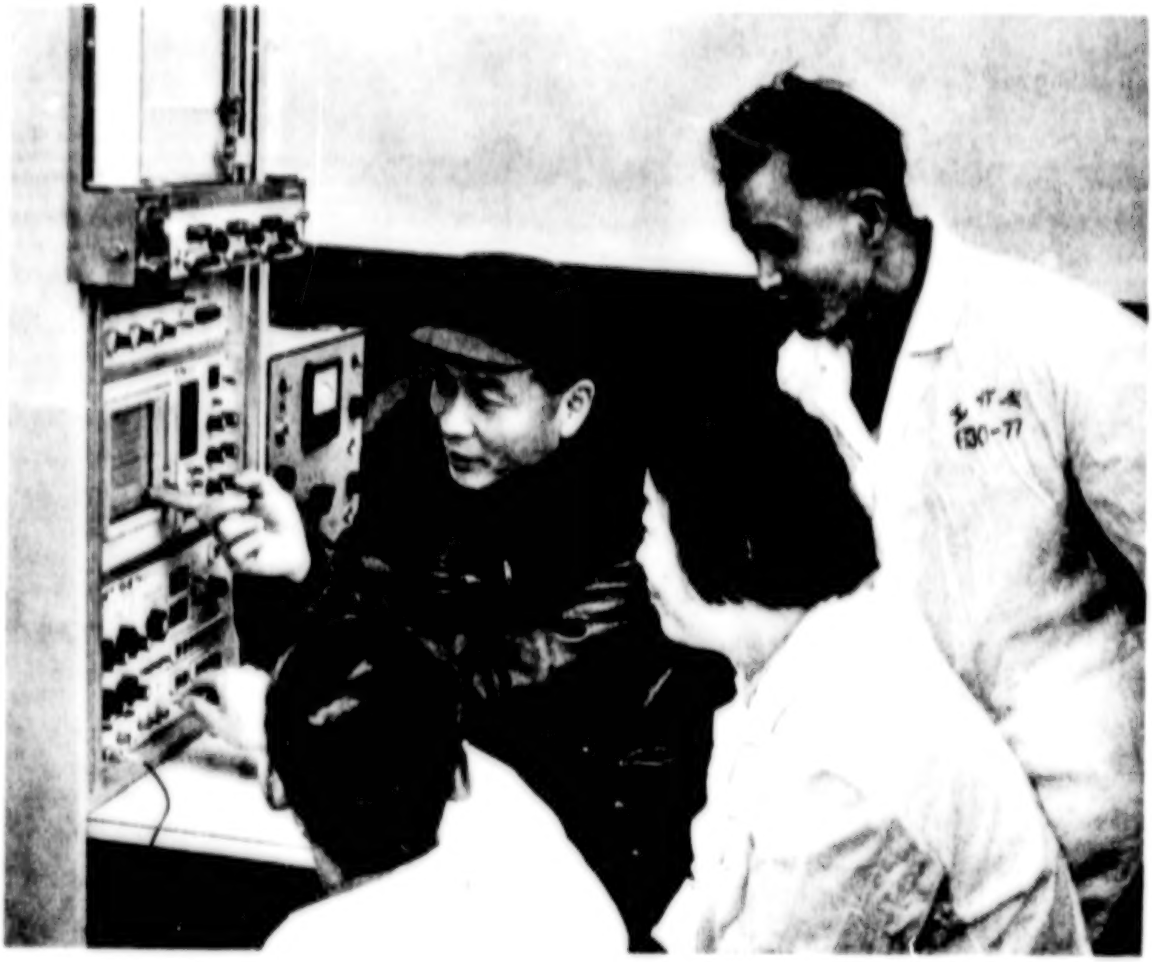
[For article, see DAILY REPORT-PEOPLE'S REPUBLIC OF CHINA 24 Jan 80 pp L-10-L-12]

[Photo captions]



A new type of fighter plane being tested.

Hua Jun (second right), Wang Ang (first left) and other test flight pilots together diligently studying test flight operations.



Wang Ang and scientific research personnel together analyzing test flight data.

Hua Jun and scientific research personnel together studying test flight details and receiving new test flight assignments.

Scene of intense but orderly activity at the test flight base.

CSO: 4005

[Photo captions]

A "skylark" flies in.

The border defense fighters run towards the landing spot.

[illegible]

[illegible]

[illegible]

[illegible]

A song and dance ensemble brings entertainment for the border defense fighters.

Formerly in winter, the fighters depended on this kind of sleigh for transport.

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STEP UP THE BUILDING OF THE MOTHERLAND

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 4, 1980 p 35

[Text]

Expansion of a Motor Vehicle Plant

After more than two years of arduous struggle, commanders and fighters of an unidentified unit of the capital construction corps of engineers have completed the first-phase expansion of the Jinan Motor Vehicle Manufacturing Plant. A new assembly line for trucks has already officially gone into production as of January of this year. Included in this assembly line are the main assembly line and subassembly lines for such parts as engines, radiators, tires, cabs, front and rear axles and springs. It has a fairly high degree of automation. According to its design capabilities, the assembly line can turn out one truck every 12 minutes and 5,000 "Huanghe" [Yellow River] or 6,000 "Luoman" [Roman] trucks each year.

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MILITARY AND PUBLIC SECURITY

CHINA'S SHIPBUILDING INDUSTRY SAILS AHEAD

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 4-7

[Article: "Let the Ships Sail Across China's Vast Territorial Waters"]

[Text] Since the founding of our country, China's shipbuilding industry has had very great development and has gone from repairs and replacements to manufacturing, from copying the ships of others to coming out with its own research and designs and from being able to build small vessels to being able to build combat and oceangoing ships of a certain standard.

From the start of the First Five-Year Plan, China has carried out rebuilding and expansion of its existing shipyards and made preparations for the establishment of organizations for shipbuilding research and design. Moreover, it has imported materials and component parts of equipment from abroad to reproduce certain types of military vessels. It has also designed and built its own 10,000-ton class oceangoing ships. This has brought the history of only being able to make repairs and not manufacture to an end. During the early 1960s, in a breach of faith the social-imperialists tore up the agreements we made. The broad masses of staff members and workers in our country's shipbuilding industry, however, persisted with the policy of self-reliance. On the one hand, they set up research and design organizations with almost all the necessary departments to carry out their own research and design of military vessels. On the other hand, they focused attention on building plants that made such component parts of equipment for ships as diesel engines and navigation instruments. After a period of hard work, they initially set up a network of industries engaged in manufacturing component parts for shipbuilding, built torpedo submarines and guided missile boats whose materials and component parts were all domestically manufactured and designed and built their own combat and auxiliary vessels, such as high-speed gunboats, torpedo boats, submarine chasers, escort ships and minesweepers. This has greatly changed the face of scientific research and production in the shipbuilding industry. In the 1970s the shipbuilding industry continued to move ahead. Under the joint efforts of various departments of the national economy, it has once again successfully developed in succession such new types of vessels as guided missile destroyers, guided missile and gunnery escort ships and landing hovercrafts. Moreover, it has supplied shipping departments with a number of 10,000-ton class coastal and oceangoing ships, which include 50,000-ton oil tankers, 25,000-ton freighters and 7,500-ton passenger and cargo ships. It has also supplied other departments of the national economy with such specialized vessels as ocean surveying ships, large dredgers, high-powered tugboats and jack-up drilling rigs. Since the smashing of the "gang of four," especially since the 3d plenary session of the 11th CCP Central Committee, the shipbuilding industry has conscientiously implemented the policy of readjusting, restructuring, consolidating and improving the national economy, greatly improved product quality, further strengthened enterprise management, studied and introduced foreign advanced technology, stepped up the pace of developing new products and endeavored to contribute to carrying out of the four modernizations.

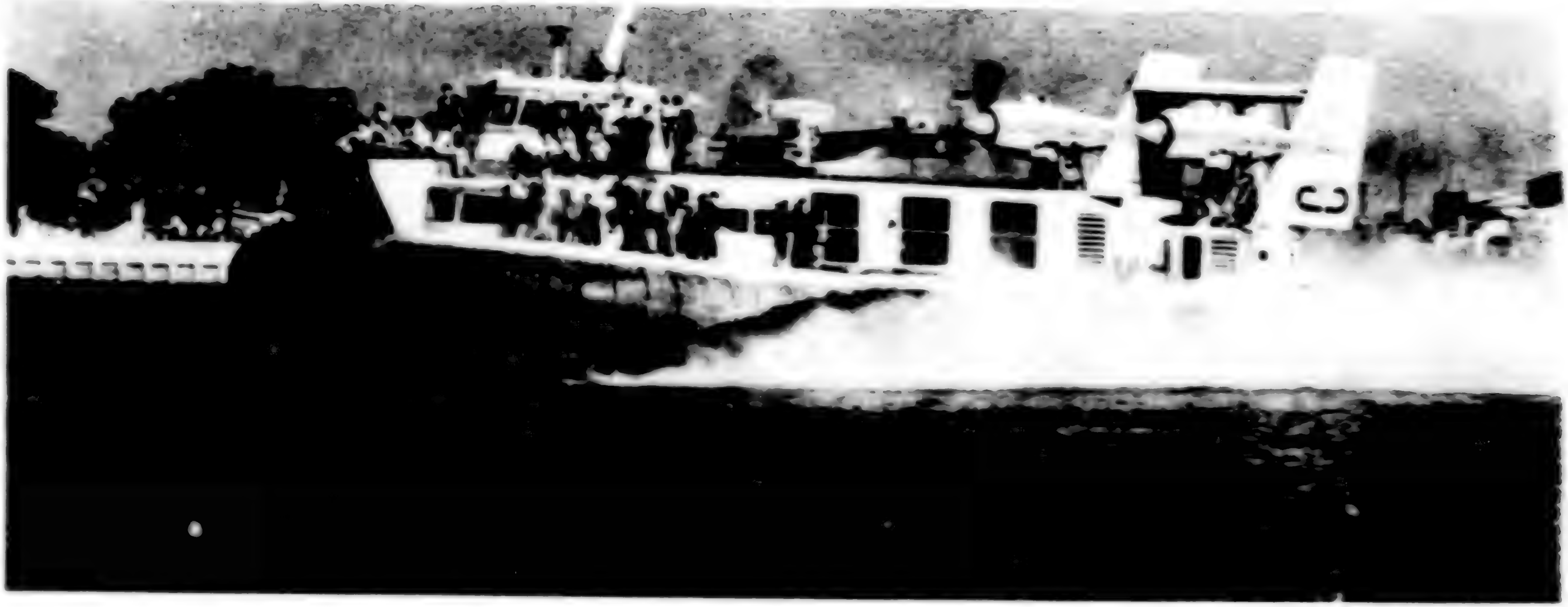
Let greater numbers of vessels sail China's vast coastal waters and territorial seas and let a greater number of transport ships ply the rivers and oceans.

Building a guided missile destroyer.

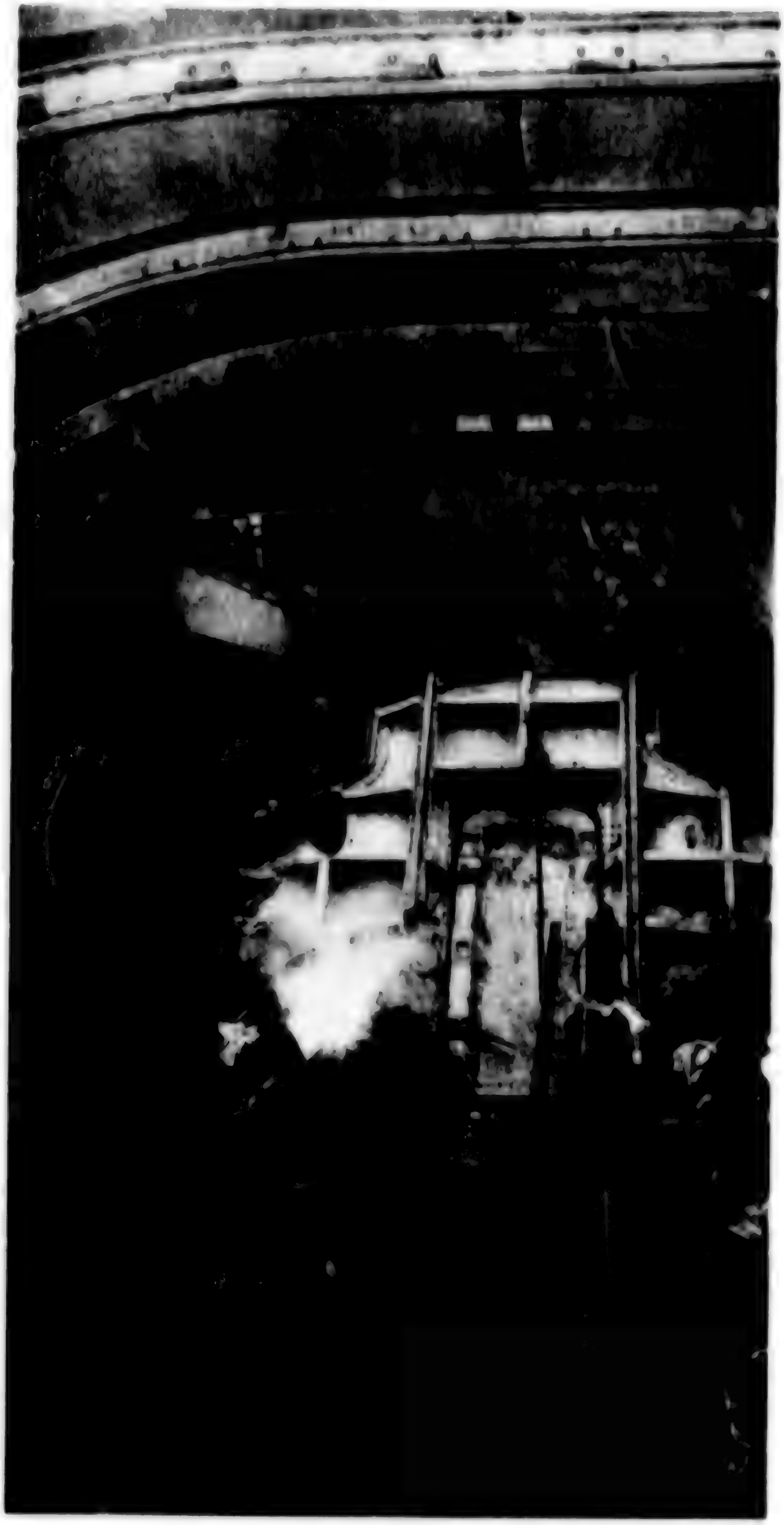
Testing the performance of the rear section of a ship's gun.

A newly launched Chinese-built guided missile destroyer. Its primary combat role is to use guided missiles and guns to attack enemy combat vessels and port and onshore facilities.

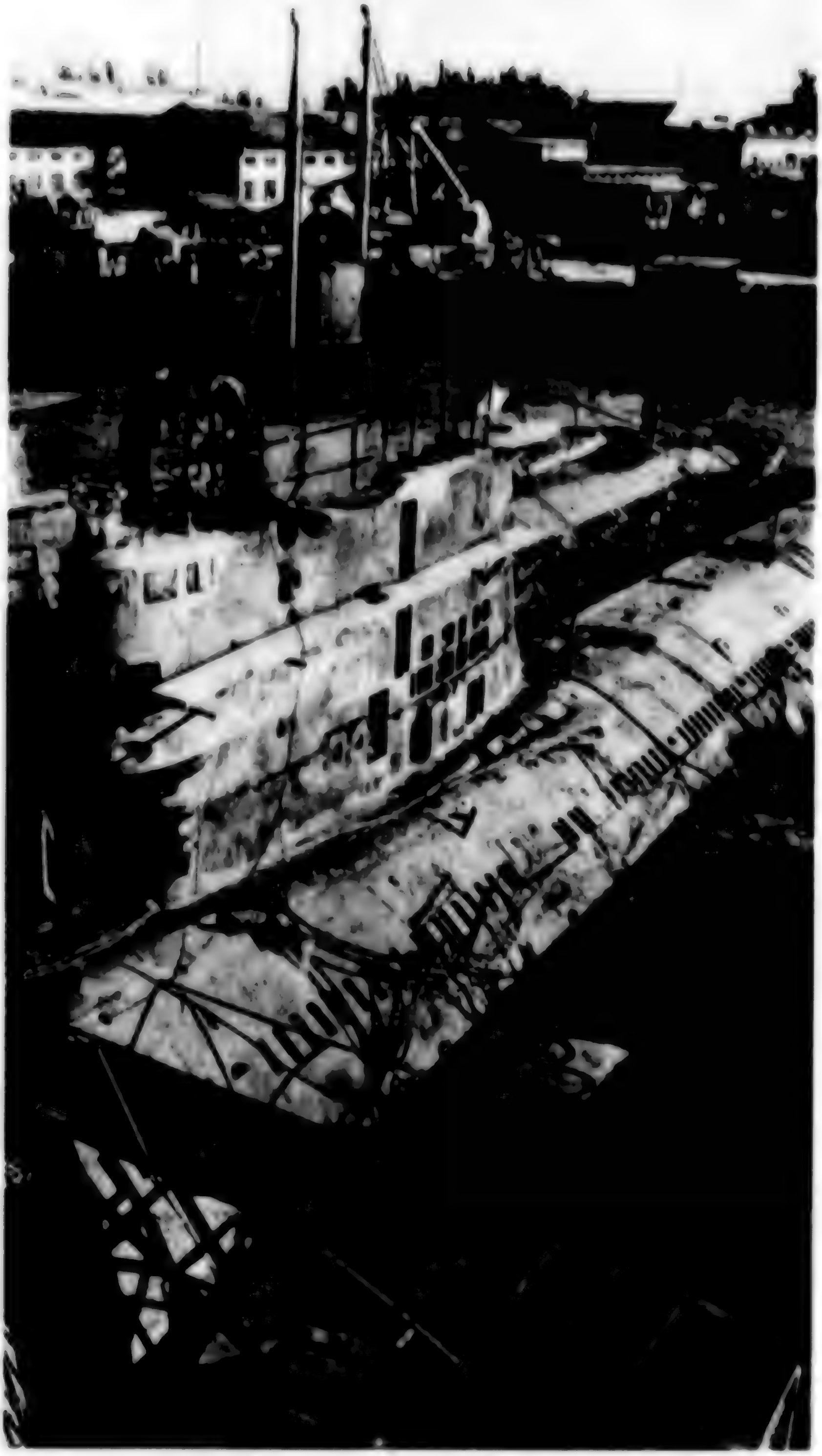
Chinese-built guided missile boats cut through the motherland's territorial waters. Primarily for offshore combat, these boats use guided missiles to attack large and medium-size enemy combat ships.



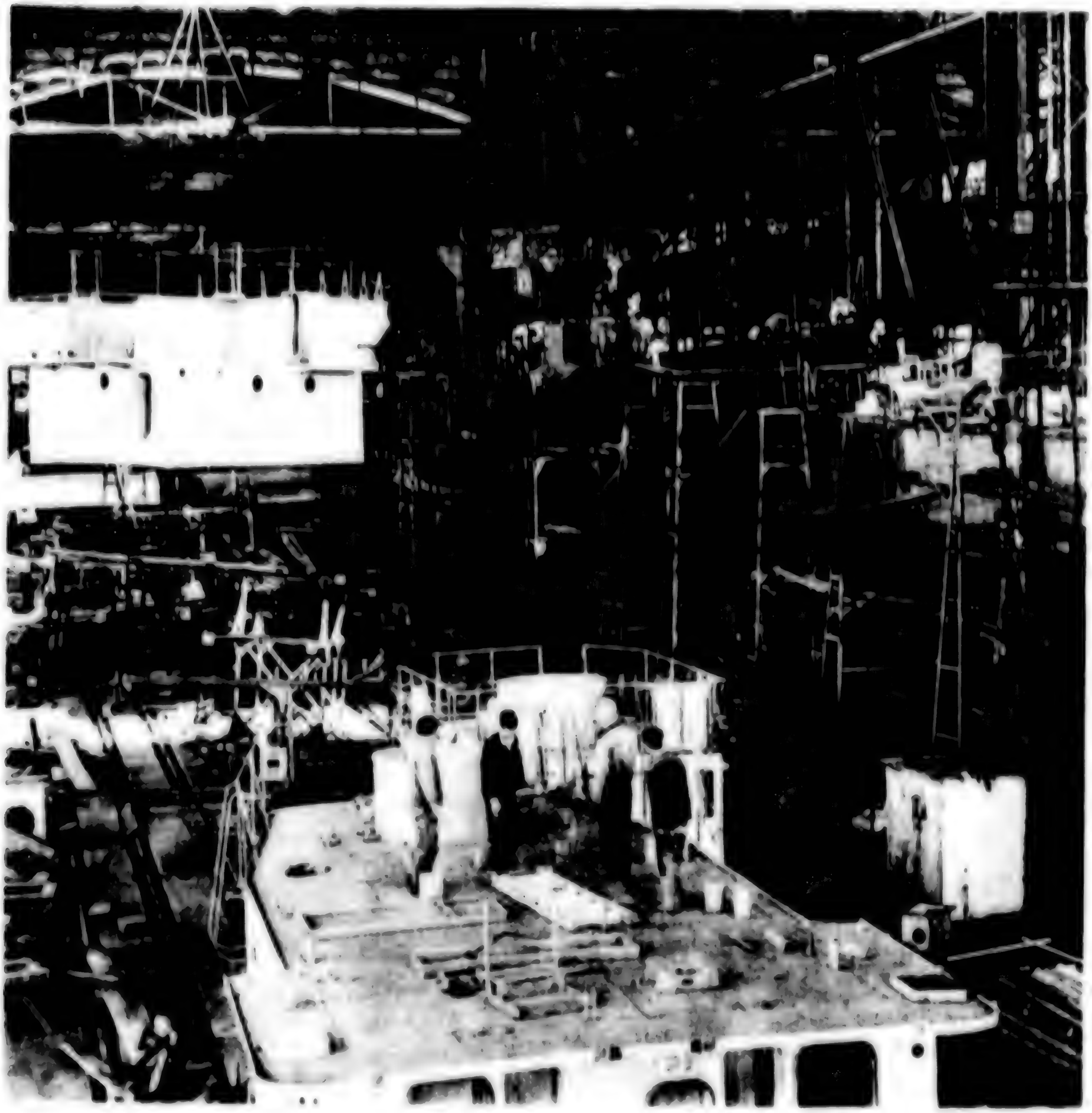
A Chinese-built landing hovercraft undergoing a test-run. It can be driven at high speeds on water, land and beaches, and can be used both for amphibious combat landings and for transport operations for offshore islands.



Carefully welding a ship's guided missile launcher.



Finishing up the last bit of work in building a submarine.



A submarine chaser being built. It primarily uses depth charges as weapons to attack enemy submarines and protect China's territorial seas.

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A NEW TYPE OF RIFLE AND GRENADE DEVELOPED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 8-9

[Article by Huang Jinghan [7806 5427 3352] and Lu Xiaoming [7627 2556 2494]]

[Text] Tang Wenlie [0781 2429 3525], an assistant in the ordnance department of the Zhejiang Military District with only five years of education, has successfully trial made a small steel pellet grenade, a dual-purpose grenade that can be fired from a gun or thrown by hand, and a new type of antitank grenade, and has successfully improved and come up with a new type of the 7.62mm automatic rifle. He did these things one after another, and he was cited as an expert in tackling key problems.

When Tang Wenlie first joined the service, he was assigned as a statistician to an ammunition depot. With his own eyes he had seen a comrade-in-arms hurt by a Soviet-made grenade that had exploded prematurely and he got rid of a large number of grenades because they had lost their effectiveness. So Tang determined to go his own way to try to make a good showing for the motherland. He knew that the key to preventing grenades from exploding prematurely and becoming duds was to improve the detonator. Therefore, he diligently read the relevant books and analyzed many types of detonators. After working on several hundred duds, he finally resolved the problem. In 1973 a small steel pellet grenade that explodes on impact met design requirements and went into production after the design was finalized. It has become one of our country's new types of grenades.

After Tang Wenlie became qualified to speak technically on the development of grenades, he joined the march toward the four modernizations and turned his efforts to the improvement of automatic rifles. Working together with an innovation team, he earnestly studied the developmental trends in light weaponry from abroad and analyzed over a dozen types of similar domestic and foreign made rifles. Thus, by adopting the good points of each, he developed an automatic rifle. This rifle has been a new breakthrough in mechanical structure. Compared to the Type 63 automatic rifle, it has 38 fewer parts, is 1.3 jin lighter, and has a smaller area of bullet scatter and greater accuracy. The leadership and departments concerned have enthusiastically praised it.

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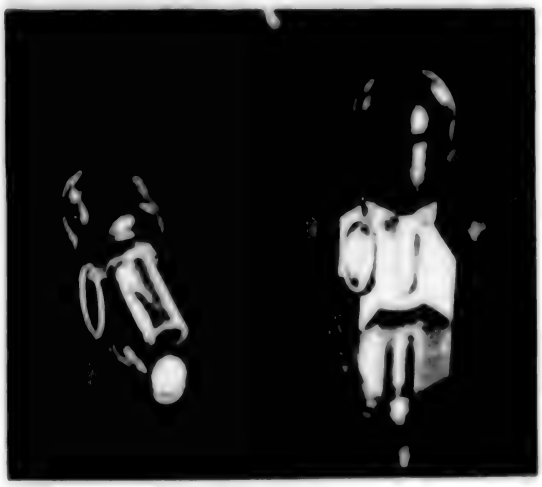

(3)

Caption 1. An improved automatic rifle that has been tested and performed satisfactorily.

Caption 2. A new antitank grenade has reached domestic advanced levels in the areas of parts construction, armor penetration, maximum throwing range and lightness.

Caption 3. Type 73 small steel pellet grenade (left), and a dual-purpose grenade that can be fired from a gun or thrown by hand. It is compact, light and has strong destructive power.

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MILITARY AND PUBLIC SECURITY

ANTITANK RIFLE GRENADE DEVELOPED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 10-11

[Text] Tang Chaoming [0731 2600 2494], deputy ordnance section chief of an unidentified unit of the Lanzhou Units, has, after an extended period of hard work, successfully developed an antitank rifle grenade that has made things easier for infantrymen in antitank warfare.

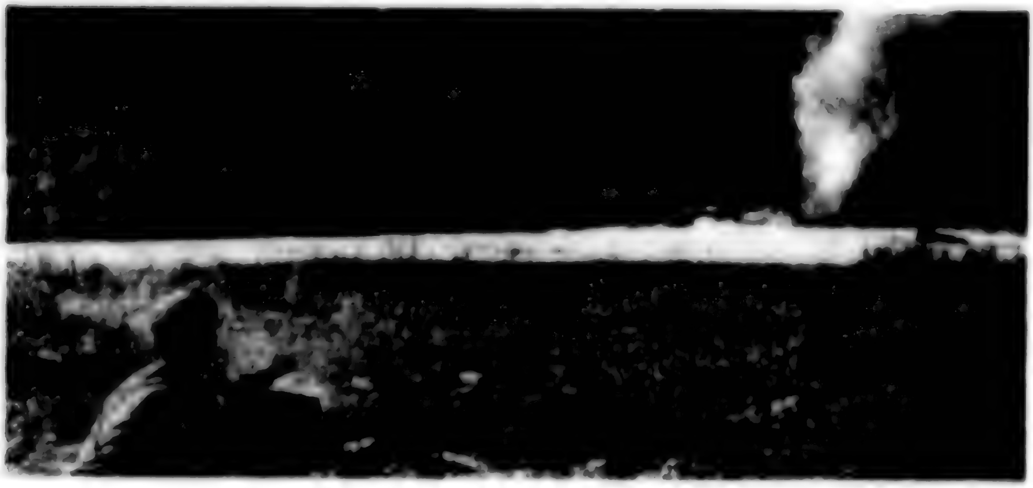
Six years ago Tang Chaoming had taken part in an antitank warfare technical innovations meeting and had been greatly moved by a speech Ye Jianying delivered at the meeting. Hence he expressed to a head comrade his wish to develop a type of simple antitank rifle grenade which would allow every infantryman to use the weapon he had at hand to destroy enemy tanks.

To turn a wish into reality, however, is not an easy task. At the ordnance school Tang Chaoming had specialized in the study of guns and knew little about ammunition. For the sake of developing an antitank rifle grenade, he took experts as his teachers, diligently studied the knowledge on ammunition, conscientiously carried out analytical research on the structure of a number of small, light weight, easy to handle and fairly powerful gun shells, put forward a plan for development and personally conducted tests. After more than a year of hard work, he achieved satisfactory results in which a rifle grenade could pierce a steel plate target within a range of 200 meters. Among the sound of praises, Tang looked for shortcomings and again conducted tests to improve and perfect the grenade. With the assistance of a light weapons research institute of the General Logistics Department and departments concerned and after several years of hard work, the antitank rifle grenade was finally successfully developed. This antitank rifle grenade has fairly strong armor penetration power and weighs about the same as a hand grenade. Furthermore, it is easy to use and needs only to be mounted on the gun barrel and fired by a pull of a trigger.

Tang Chaoming (left) examining a rifle grenade component part being made.

An external appearance of an antitank rifle grenade and its component parts.

Tang Chaoming personally conducting test firings.



Hitting the target, the test is successful.

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MILITARY AND PUBLIC SECURITY

ANTIAIRCRAFT ARTILLERY EQUIPMENT AND MATERIEL IMPROVED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 10-11

[Article by Lin Yonghui [2651 3057 1920], Zhang Jinjie [1728 6855 2638] and Jia Mingzu [6323 2494 4371]]

[Text] Feng Aimin [1409 1947 3046], commander of an unidentified antiaircraft artillery division of the Shenyang Units, has put his knowledge of science to good use in the area of technical innovations. As of now, he and a technical innovation team have successfully developed over 20 items of equipment and materiel for antiaircraft artillery training which have contributed to unit building.

For instance, a mid-range disc radar antenna that the unit was equipped with had to be mounted on top of radar vehicles, and three or four persons had to work more than a half hour to put it up. Moreover, being exposed, it made for an easy target. In order to change this situation, Feng pointed out that the antenna and radar vehicle should be separate, and suggested the idea of an antenna that could be automatically raised and lowered. He and an innovation team together built a model and after testing it more than ten times, successfully came up with an innovation. This antenna is power-operated, automatically raised and lowered and can be set up and put into operation in only two or three minutes. With the antenna and radar vehicle separated, enemy aircraft cannot easily detect and destroy the antenna.

In the past, live-ammo antiaircraft target practice had been stipulated, but the added cost of artillery shells made for very little of it. Would it be possible to use antiaircraft machine guns instead of rifles [which apparently had been used, but were not too effective] which would enable the original plan to "replace artillery with guns" to again move ahead?

Based on his knowledge of mechanics, Division Commander Feng made repeated calculations and selected appropriately suitable types of steel to build a gun mount which would make it possible to substitute guns for artillery pieces. This innovation to use machine guns instead of artillery provided very good results. After the design was finalized and put into production, the mounts were provided to antiaircraft artillery units.

Feng Aimin and members of an innovation team watching work being done on the "vehicle-towed automatic power-operated tower antenna."

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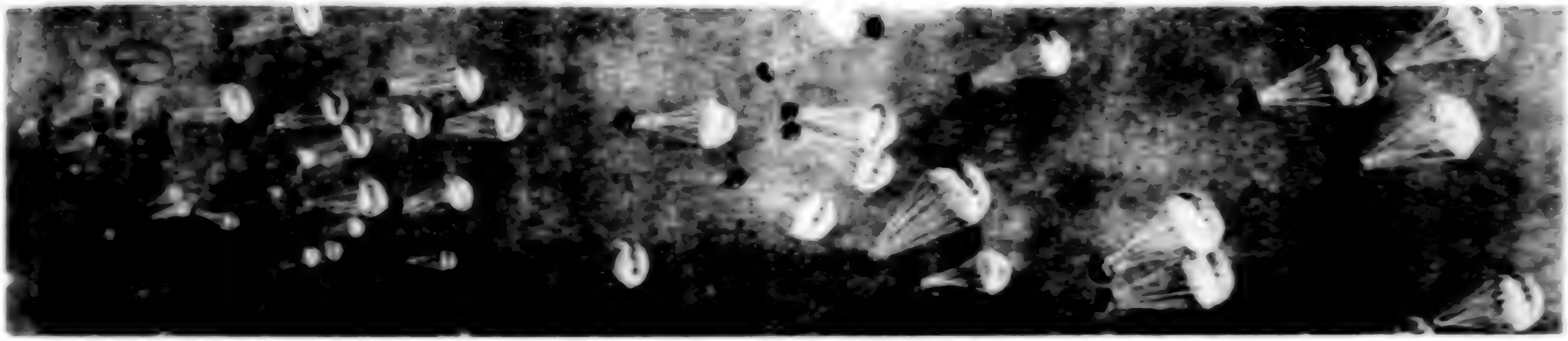
MINE-LAYING MISSILE VEHICLE DESCRIBED

Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 12-13

[Text] Engineering troops and departments concerned have cooperated to successfully trial-manufacture a mine-laying missile vehicle. This vehicle is a new piece of equipment which can quickly lay down antitank mines from a distance. It uses the missile engine for motive power to put a payload of land mines in the air over a predesignated area. A release mechanism drops the land mines which are equipped with drogue chutes from their hold and they scatter down over the land. Here they will blow up, obstruct or delay concentrations of enemy tanks and armored vehicles and create favorable conditions for our army's other antitank weapons to make full use of firepower to destroy the enemy tanks. After the missile minelayer was set up in the units, the cadres and fighters raced against time to get a tight hold on training and are now determined to bring the power of this equipment into full play in a future war against aggression.



Land mines falling from the sky to form a minefield over a large area for defense against tanks.

[No caption provided]

Firing at the predesignated target.

Pointer practicing sighting and accurately and rapidly zeroing in on the target.

Fighters practicing inserting the antitank mine-laying missile.

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MILITARY AND PUBLIC SECURITY

WATER CONSERVANCY PROJECTS ALONG THE YELLOW RIVER

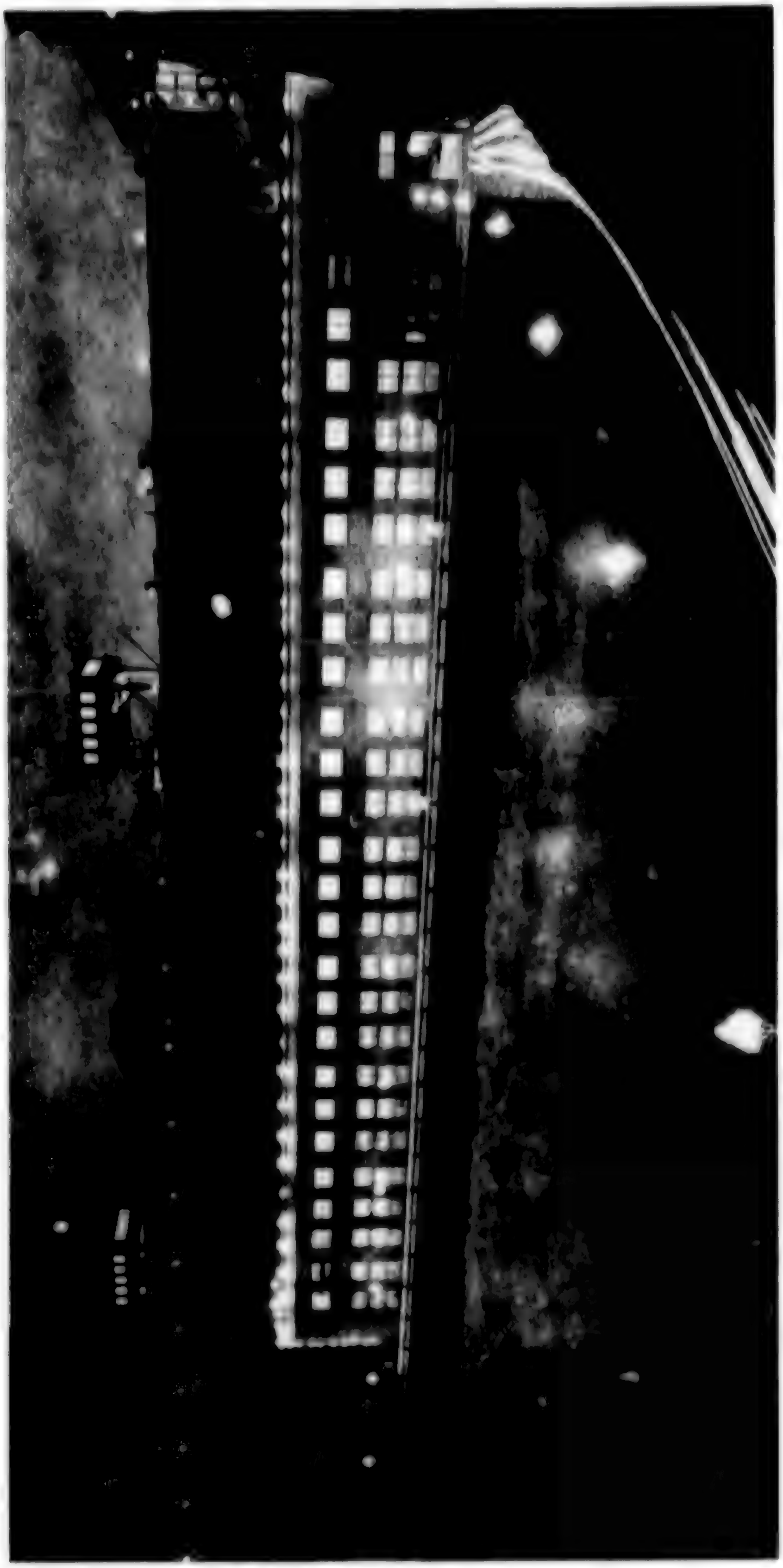
Beijing JIEFANGJUN HUABAO [LIBERATION ARMY PICTORIAL] in Chinese No 5, 1980 pp 24-29

[Article by Chen Shangkui and photos by Han Sandang, Zhou Yongshou, and Zu Ruiting: "Jewels of the Yellow River"]

[Summary] In the past 20 years, millions of construction workers have been damming the Yellow River and have built seven large-scale water conservancy projects and large- and medium-sized hydroelectric power stations, including the Yanguoxia, Liujiaxia, Bapanxia, Qingtongxia, Sanshenggong, Tianqiao, and sanmenxia projects. The installed capacity totals 2.4 million kilowatts, generating 11.7 billion kilowatt hours of electricity per year, equivalent to 2.7 times the nation's 1949 electric power output. Meanwhile, people have reinforced thousand li of dikes along the ancient river and comprehensively tapped and utilized the water resources and developed irrigation projects.

During the socialist construction program, key water conservancy projects and hydroelectric power stations along the Yellow River have markedly demonstrated their beneficial results. Through high voltage transmission lines, powerful electric current is being transmitted to the big cities and rural areas in Shaanxi, Ningxia, Qinghai, Henan, Shanxi, and Nei Monggol, promoting rapid development of the coal, petroleum, chemical, metallurgical, machine-building, and woolen textile industries in these regions. Constant flows of river water are irrigating more than 50 million mu of farmland, making it possible to produce fairly good harvests in agriculture, forestry, and livestock production and transforming barren flats on the fringes of deserts into a granary.

Tapping the Yellow River water resources is only in the initial stage. There are drops totalling 4,800 meters along the 5,464-kilometer river course starting from the Qinghai Plateau. Particularly, the section between Qinghai's Longyang Gorge and Ningxia's Qingtong Gorge, where the banks are precipitous, currents swift, and drops concentrated, is a "rich mine" for hydropower generation. According to plans formulated by the water conservancy and electric power departments, this river section will become one of China's ten major hydroelectric power bases. A series of new water conservancy and hydropower projects will be built along the middle reaches of the Yellow River. When these projects are completed, the power stations on the Yellow River will have a total installed capacity of 12 million kilowatts and will generate 50 billion kilowatt hours of electricity a year.



Yanguoxia Hydroelectric Power Station on the Yellow River in Gansu

A view of the Bapanxia Hydroelectric Power Station in Gansu Province.

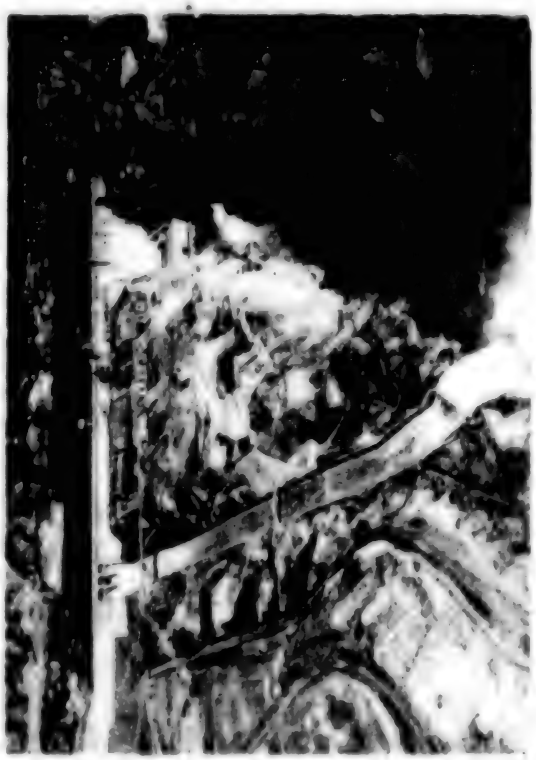
(3)

(5)

Photo 3. The Liujiaxia Dam is like an iron wall, standing erect in the canyon.

Photo 4. Currently China's largest hydroelectric power station, the Liujiaxia Hydroelectric Power Station in Gansu has a total installed capacity of 1,225,000 kilowatts. It serves as a multi-purpose project for flood and ice-run prevention and for irrigation and fish breeding.

Photo 5. In addition to generating power, the Qingtongxia water conservancy project delivers through various trunk canals Yellow River water to large tracts of irrigated acreage at the foot of the Helanshan Mountains.



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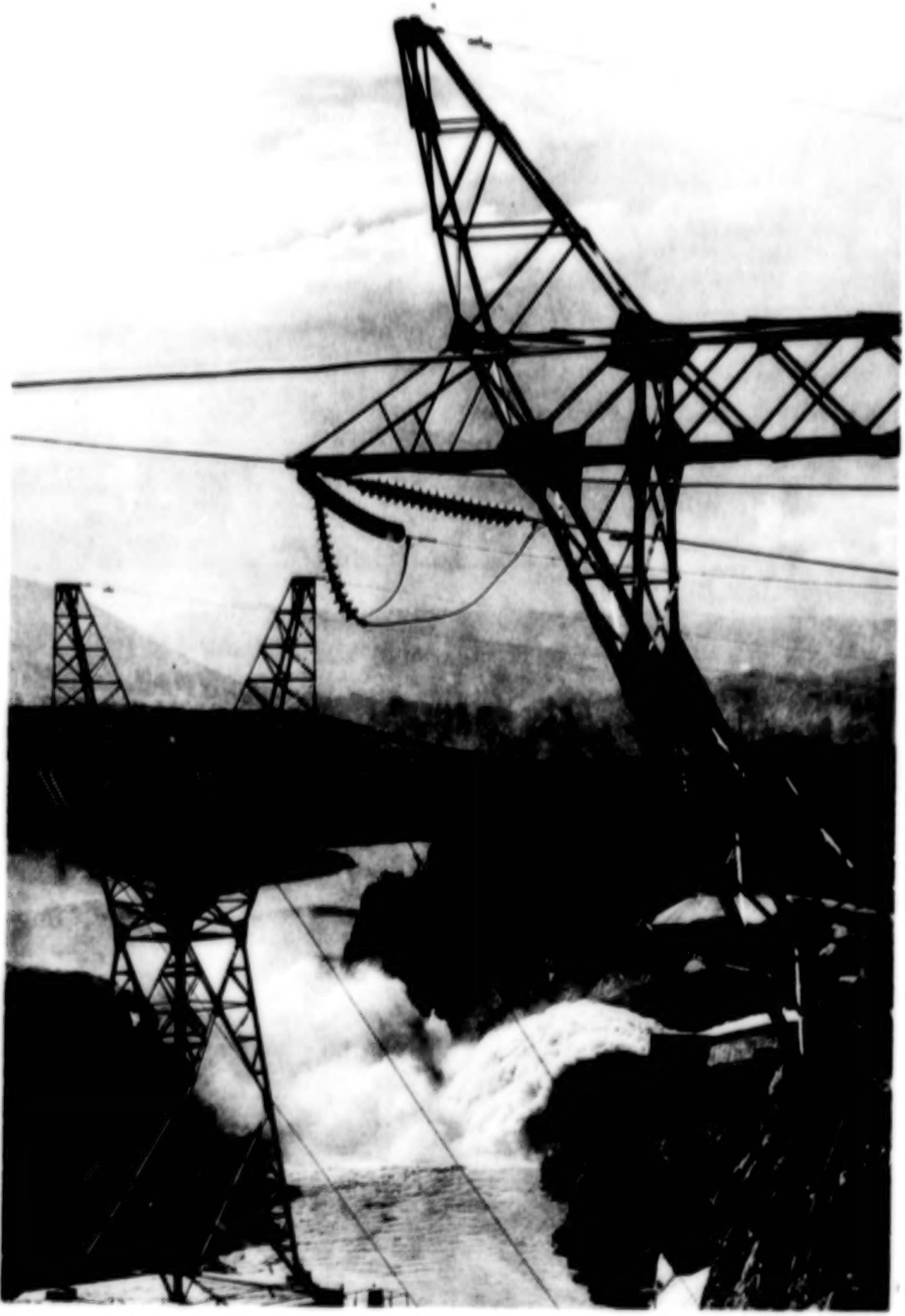
Concrete dam of a hydropower station blocks the Yellow River, forcing the river water to do what people want it to do.

The rebuilt Sanmexia Hydroelectric Power Station in Henan has taken on a new look. In addition to generating electric power, it effectively withstands high water from the lower reaches.

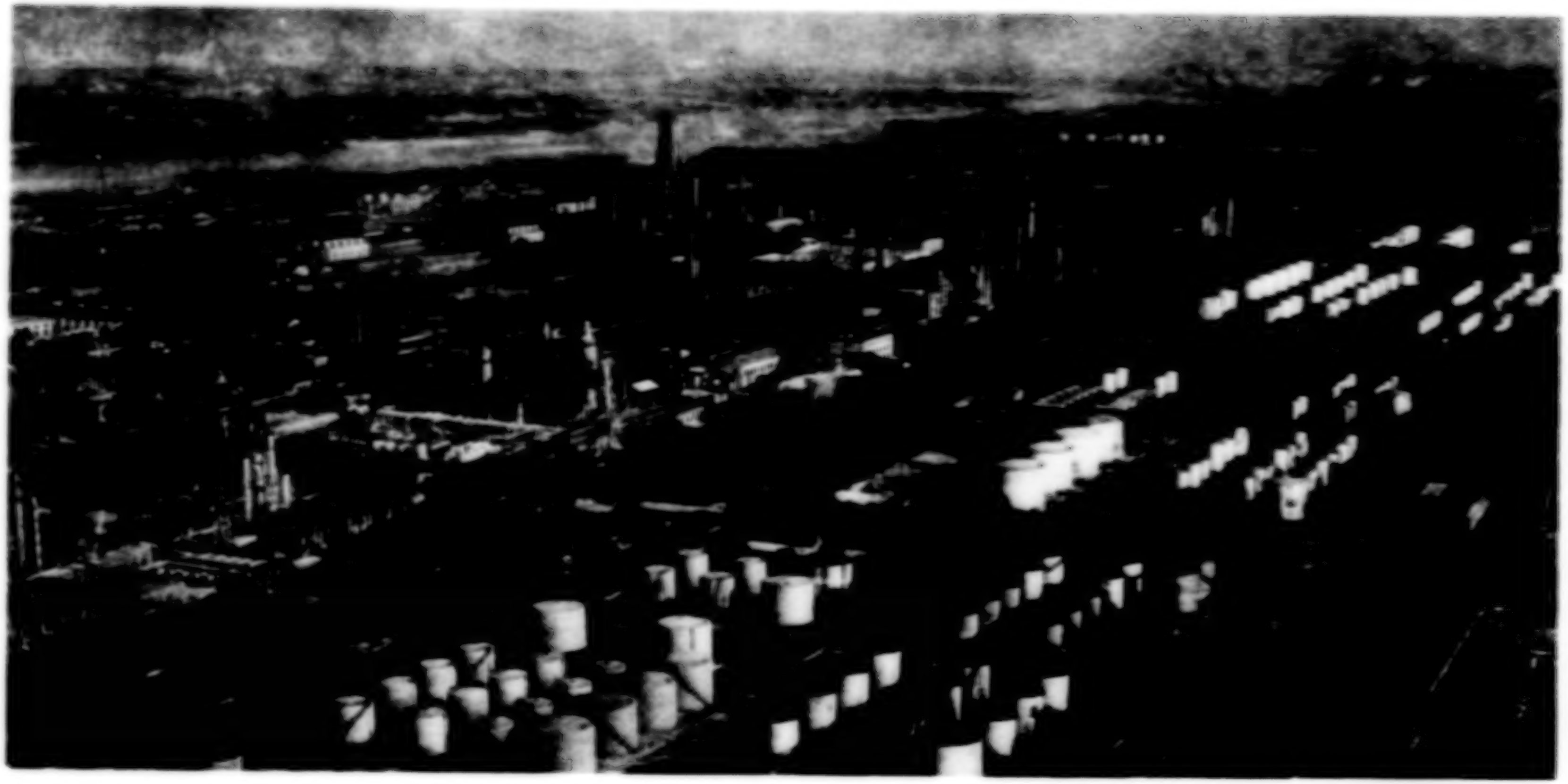
The Tianqiao Hydroelectric Power Station in Shanxi is an experimental power station in the sandy river section of the Yellow River's middle reaches. People on both banks of the river employ electric power to pump water up to the mountains, thereby improving farm production in some of the hilly regions in Shaanxi and Shanxi.

The Longyangxia Hydroelectric Power Station, which is under construction, will become another large-scale key water conservancy project on the Yellow River. Its total installed capacity will reach 1.5 million kilowatts.



Row after row of ultra high voltage transmission lines extend to all corners of the Northwestern Region.

The pumping and irrigation station in the Jingtaichuan region of Gansu diverts water from the Yellow River up to the perennially dry highland, making the barren flats bordering the desert a new oasis.



Hydroelectric power from the Yellow River has promoted industrial growth in the Northwest. An oil refinery in the ancient city of Lanzhou on the Yellow River bank is thriving.

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